

when their Colours appear strong and perfect. For once, by such means as I then had, I measured the greatest Semi-diameter of the interior Iris about 42 degrees, the breadth of the red, yellow and green in that Iris 63 or 64 minutes, besides the outmost faint red obscured by brightness of the Clouds, for which we may allow 3 or 4 minutes more. The breadth of the blue was about 40 minutes more besides the violet, which was so much obscured by the brightness of the Clouds, that I could not measure its breadth. But supposing the breadth of the blue and violet together to equal that of the red, yellow and green together, the whole breadth of this Iris will be about  $2\frac{1}{4}$  degrees as above. The least distance between this Iris and the exterior Iris was about 8 degrees and 30 minutes. The exterior Iris was broader than the interior, but so faint, especially on the blue side, that I could not measure its breadth distinctly. At another time when both Bows appeared more distinct, I measured the breadth of the interior Iris 2 gr. 10', and the breadth of the red, yellow and green in the exterior Iris, was to the breadth of the same Colours in the interior as 3 to 2.

This Explication of the Rain-bow is yet further confirmed by the known Experiment (made by *Antonius de Dominis* and *Des-Cartes*) of hanging up any where in the Sun-shine a Glass-Globe filled with Water, and viewing it in such a posture that the rays which come from the Globe to the Eye may contain with the Sun's rays an Angle of either 42 or 50 degrees. For if the Angle be about 42 or 43 degrees, the Spectator (suppose at O) shall see a full red Colour in that side of the Globe opposed to the Sun as 'tis represented at F, and

if that Angle be (the Globe to E) the green and blue side. But if the Angle be lifted up the Globe in that side of the Angle be made good to H) the red will be yellow, green and blue, or otherwise more magnitude.

I have heard of a Candle be refracted blue Colour falls red in the Prism he shall see blue of the Globe and contrary order to w Candle being very the difficulty of Eye. For, on t cation to observe that the Spectator which falls upon true also in Cand ved slowly from t Candle to the Ey then the blue, an it falls upon the first, and then th